Project Report
Office of International Cooperation
and Development
U. S. Department of Agriculture
Contract # 53-319R-0-166

United States Department of Agriculture

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PLAN SIERRA NUTRITION SURVEY

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January 1981

TABLE OF CONTENTS

NUTRITION SURVEY OF THE PLAN SIERRA

The Plan Sierra is a large integrated rural development project in the Dominican Republic. The main objectives of the project are to conserve the natural resources of the region and to improve the standard of living of the people. These objectives will be achieved through programs of land management, agriculture, education, and health. Although nutrition is considered to be an integral part of health and education programs, a comprehensive nutrition plan has not been developed. A nutrition survey was conducted to determine the extent of malnutrition in the area served by the Plan Sierra and to obtain information regarding food beliefs and practices needed to design a viable nutrition program.

I. BACKGROUND

The Plan Sierra encompasses 2000 square kilometers in the mountains southwest of Santiago, the second largest city in the Dominican Republic. The region contains the headwaters of the primary rivers that irrigate the Cibao Valley, the most fertile agricultural region of the country. The population, approximately 120,000, is scattered throughout the region with the highest density in the central portion. The region has been divided into 3 zones, Janico, San Jose de las Matas, and Moncion. Each zone is named for its principal town. According to the 1970 census these towns range in population from 1110 (Janico) to 2691 (San Jose de las Matas).

The Plan Sierra has been planned and funded primarily by the government of the Dominican Republic. The initiative for the project came from the Roman Catholic Bishop of Santiago, the faculties of the Universidad Catolica Madre y Maestra (UCMM) and the Institute Superior de Agricultura (ISA), and business and government leaders from the Santiago area. President Antonio Guzman was

responsible for the implementation of the Plan Sierra under the direction of the Ministry of Agriculture. The Ministries of Public Health and Education, UCMM, and ISA are also involved in the fulfillment of the presidental mandate. The government originally pledged 21 million pesos to the project, over a 4 year period. This amount of funding, if realized, is not sufficient to fund all of the planned programs. Additional funds have, therefore, been sought primarily in the areas of reforestation, health, and education.

The main office of the Plan Sierra is in San Jose de las Matas, 41 kilometers from Santiago. Although the project is funded by the government of the Dominican Republic, program and budget are under the direction of a board of directors and the executive director. The Bishop of the Diocese of Santiago is president of the Board of Directors which also includes representatives from UCMM, ISA, and government agencies involved in the development of the Plan Sierra.

Educational programs that are being implemented include further education for the school teachers, vocational education, and non-formal education for the women. Over 100 women's clubs have been organized throughout the region. These clubs will provide a foundation for the woman's program although the educational content of the program has not yet been determined.

Health programs are being planned to compliment and extend the programs of the Ministry of Health. There are presently over a hundred health promotors in the region. The Kellogg Foundation has been assisting in developing a health program.

II. METHODOLOGY

A stratified cluster technique was used to obtain the sample. Each of the three zones of the Plan Sierra has been divided into 10 administrative communities. The sample consisted of 10 mothers of children less than 5 years of age from each community in each zone. The first mother in each community was randomly selected; additional subjects were obtained through cluster sampling. Each of the mother's children under 5 years of age also received a medical history and examination. Usable results were obtained from 295 mothers and 446 children.

Data were collected by the medical team in each of the three zones. Each team consisted of a physician, dentist, nurse, laboratory technician, and social worker. All mothers were interviewed in their homes by the social worker. Children were taken to the medical site for a clinical examination and anthropometric measurements. The clinical examination included changes in hair, eyes, skin and mouth generally attributed to malnutrition. Anthropometric measurements of weight, length (less than 3 years of age) or height (3 years of age and older), head circumferance, nad arm circumferance were obtained according to the procedures outlined by Zerfas (1979). The physician also estimated degree of malnutrition according to the Gomez classification (1956). Blood samples were drawn by the laboratory technician for hemoglobin and hemotorit analysis. All data were collected during April and May, 1980. The NCHS anthropometric standards were used in the data analysis.

III. RESULTS

Usable data were obtained from 295 families. Differences between the three zones were insignificant except for a few variables which will be noted. The medical teams weighed, measured, and examined 446 children less than 5 years of age.

Family composition

Mean household size was 6.4 ± 3.1 persons. Fathers were present in 94.2% of the households. Education of women and men are shown in Tables 1 and 2. Approximately 90% of both males and females had attended at least one year of school. Women had attended school slightly longer than men ($\bar{X}_F$ = 3.5 vs $\bar{X}_M$ = 3.2). Although there was an expected negative association between age and years of school completed by the women, this was not the case for the men. The men less than 25 years of age were more likely to have gone to secondary school (31.2%) but also were more likely to have never attended school (25.0%). Only the group of men over 55 years of age had a higher percentage of non-attenders (35.0%), than the 25 year old men. The majority of the men (72.9%) were farmers as shown in Table 3. The remaining men were about evenly divided between occupations requiring some formal training or education, craftsmen, and semi- or unskilled workers. Although most of the women (72.2%) were housewives, as seen in Table 4, the women who listed other occupations were four times as likely to have a skilled occupation as an unskilled one. Interstingly, 7.1% of the women said they did nothing.

All of the respondants had at least one child less than 5 years of age. Although only 9.7% of the women were pregnant at the time of the study, they had an average of 5.8 pregnancies. These pregnancies had resulted in 5.1 live births and 4.3 children living at the time of the study. This number corresponds to the number of children listed as living in the household at the

Table 1. Fathers years of school completed by age.

Age (years)	No School %	(N)	1-4 years %	(N)	5-7 years %	(N)	≥ 8 years %	(N)	Total %	(N)
≤ 25	1.5	(4)	1.8	(5)	0.7	(2)	1.8	(5)	5.8	(16)
26-35	1.8	(5)	22.3	(61)	9.8	(27)	3.6	(10)	37.6	(103)
36-45	2.9	(8)	28.8	(79)	1.8	(5)	1.4	(4)	35.0	(96)
46-55	1.8	(5)	10.2	(28)	1.4	(4)	0.7	(2)	14.2	(39)
> 55	2.6	(7)	4.4	(12)	-	-	0.4	(1)	7.3	(20)
Total	10.6	(29)	67.5	(185)	13.9	(38)	8.0	(22)	100.0	(274)

Table 2. Mothers years of school completed by age.

Age (years)	No School %	(N)	1-4 years %	(N)	5-7 years %	(N)	≥ 8 years %	(N)	Total %	(N)
≤ 25	2.8	(8)	13.1	(37)	7.8	(22)	2.8	(8)	26.5	(75)
26-35	2.1	(6)	27.2	(77)	8.1	(23)	2.8	(8)	40.3	(114)
36-45	1.8	(5)	21.6	(61)	2.1	(6)	1.4	(4)	26.8	(76)
46-55	1.1	(3)	3.5	(10)	-	-	0.4	(1)	4.9	(14)
> 55	0.7	(2)	0.7	(2)	-	-	-	-	1.4	(4)
Total	8.5	(24)	66.1	(187)	18.0	(51)	7.4	(21)	100.0	(283)

Table 3. Occupation of fathers in the Plan Sierra region.

Occupation	%	(N)
Farmer	75.5	(215)
Semi-skilled[1]	8.8	(25)
Skilled[2]	7.4	(21)
Merchant, professional[3]	6.0	(17)
In United States	2.1	(6)
Total	99.8[4]	(284)

[1]public employee, ticket seller, vender

[2]carpenter, mason, driver

[3]merchant, dentist, teacher

[4]difference due to rounding error

Table 4. Occupation of mothers in the Plan Sierra region.

Occupation	%	(N)
Housewife	74.7	(213)
Skilled[1]	8.8	(25)
Merchant, professional[2]	4.2	(12)
Farmer	2.8	(8)
Health promoter	2.1	(6)
Nothing	3.9	(11)
Other, non specific	3.5	(10)
Total	100.0	(285)

[1]craftsman, seamstress

[2]teacher, secretary, merchant

time of the survey. Caution must be taken in interpreting these data due to the general nature of the questions and the bias of the sample toward women with preschool children. However, in this group of women, 12.1% of the pregnancies did not result in a live birth and 15.7% of the children born live were no longer living. As expected there was an extremely high correlation between the mother's age and the number of times she had been pregnant, the number of children she had born live, and the number of living children she had. There was also a negative correlation between the mother's years of schooling and these three variables.

Housing and Sanitary Conditions

Most of the families (82.9%) owned houses which tended to be small but fairly well constructed. Almost half of the houses (49.1%) had 2 rooms although the average was 2.5 rooms with a range from 1 to 6. Walls were of wood siding (92.8%) with roofs primarily either metal (52.9%) or thatch (35.8%). Most of the floors were cement (61.0%); the remainder either dirt (21.2%) or wood (17.2%). Only 10.4% of the homes had electricity. Although 70.0% received their water from a spring or river, one fourth (25.0%) received water from a faucet in their homes. The remaining 5.0% obtained water from a well. Almost half (49.0%) of the families thought their water was safe to drink. No test was made for water potability. Only one respondant had an indoor toilet but 87.3% did use a latrine. A small number used an enclosed trench (1.7%) while the remainder (10.6%) reported they had no toilet or latrine facilities. Fogons were used for cooking by 82.0% of the respondants. The remainder used either a gas stove (12.5%) or cooked on the ground (5.2%).

The association between house construction and sanitation was as expected. There was a strong correlation between the quality of roof materials and the quality of floor materials of the house. Poorer quality of

materials used in roof construction was also associated with fewer rooms. The poorer the quality of the floor, the greater the liklihood of inadequate sanitary facilities. There was no association between type of cooking facilities or land tenure and construction or size of house.

Land cultivation

Most of the men (60.0%) were small landholders working their own land. Of the landholders, 3.8% leased their land out, 3.2% were renting from someone else, and the rest were working their own land. As seen in Table 5, over 80.0% of the farmers had holdins of less than 100 tareras[1]. These holdings averaged 20.3 tareras and accounted for only 28.3% of the landholdings. Those farmers with holdings greater than 100 tareras had an average of 310.8 tareras and controlled 71.7% of the land. Not all of the available land is being cultivated. Twenty tareras or less were cultivated by 74.6% of the farmers. Land under cultivation by these men averaged 9.5 tareras. Only 12 of the farmers (6.9%) were cultivating more than 50 tareras. The purpose of cultivation was to provide for the family and to sell in 53.5% of the cases. Only 5.8% sold their entire crop. The remainder grew crops only for family consumption. Principal crops reported are given in Table 6. Yuca, the most popular crop, was grown by 81.0% of the respondants. Corn was also popular, along with kidney beans, sweet potatoes, and pigeon peas.

Food Practices and Beliefs

Family food consumption patterns were obtained through the use of food frequencies crosschecked with a simplified recall of foods consumed during the previous day's meals. No attempt was made to obtain quantitative data. Almost

[1] 1 tarera = 1.52 acres

Table 5. Number of tareras owned and cultivated by farmers in the Plan Sierra region.

Tareras[1]	Owned %	Owned (N)	Cultivated %	Cultivated (N)
1-5	25.4	(45)	30.1	(52)
6-10	15.2	(27)	22.0	(38)
11-20	15.2	(27)	22.5	(39)
21-50	21.5	(38)	18.5	(32)
51-100	4.5	(8)	2.3	(4)
> 100	18.1	(32)	4.6	(8)
Total	99.9[2]	(117)	100.0	(173)

$\overline{X}$ tareras owned = 63.8

$\overline{X}$ tareras cultivated = 19.9

[1]1 tarera = 1.52 acres

[2]difference due to rounding error

Table 6. Principal crops grown in the Plan Sierra region.

Rank	Crop	% Cultivating[1]	(N)
1	Cassava (yuca)	81.0	141
2	Corn	55.2	96
3.5	Kidney beans (habichuelas)	40.8	71
3.5	Sweet potato	40.8	71
5	Plantain	37.4	65
6	Pigeon peas (guandules)	36.2	63
7	Coffee	25.3	44

[1]more than 1 response was permitted.

all respondants said they usually ate 3 meals a day. When questioned about foods consumed the previous day, 2.7% had not eaten breakfast, 2.0% had not eaten an evening meal, and only 1 person had not eaten a midday meal. Foods reported as consumed during the previous day are shown in Table 7. Foods most frequently consumed in the morning were milk (36.6%), bread (33.2%), eggs (29.8%), and plantain (28.8%). Oatmeal, yuca, and sweet potatoes were each consumed by approximately 20% of the respondants. With the exception of otatmeal, these foods require little preparation and can be saved from the previous evening meal.

Rice and beans, which can provide a complimentary source of protein, were consumed by a majority of the respondants at midday. Over 50% reported some source of animal protein such as meat, sausage, fish, or eggs. An additional 10.8% consumed a soup or stew that usually contains meat and vegetables (primarily tubers). Plantain, spaghetti, yuca, and sweet potato were also popular. Other vegetables were rarely mentioned with the exception of ensalada, a side dish which usually contains shredded cabbage or lettuce plus sliced tomatoes.

The evening meal most frequently contained plantain, yuca, and/or a tuber such as sweet potato. Cereals, such as spahgetti, bread, and oatmeal were popular. Animal products, especially eggs (38.6%), were also consumed. Other vegetables and fruits were seldom mentioned.

The food frequency list was developed with the staff of the Plan Sierra. Except for oatmeal, which was often consumed at breakfast but was not included in food frequency list, there was remarkable agreement between the foods reported as consumed the previous day and the food frequency list. Food frequencies are given in Table 8. Sugar and oil were not named as foods consumed although they were used daily in coffee and in cooking by 96% of the

Table 7. Foods reported consumed during the previous day in the Plan Sierra region.

MORNING				MIDDAY				EVENING			
Rank	Food	%	(N)	Rank	Food	%	(N)	Rank	Food	%	(N)
1	Milk	36.6	(108)	1	Rice	83.7	(247)	1	Plantain	43.4	(128)
2	Bread	33.2	(98)	2	Kidney Beans	72.9	(215)	2	Eggs	38.6	(114)
3	Eggs	29.5	(87)	3	Meat	34.6	(102)	3	Spaghetti	34.6	(102)
4	Plantain	28.8	(85)	4	Spaghetti	27.8	(82)	4	Yuca	31.9	(94)
5	Oats	21.3	(63)	5	Salad[1]	23.0	(68)	5	Soup[3]	27.8	(82)
6	Yuca	19.0	(56)	6	Moro[2]	17.6	(52)	6	Bread	20.3	(60)
7	Sweet Potato	18.3	(54)	7	Salt Cod	10.2	(30)	7	Sweet Potato	16.9	(50)
8	Spaghetti	10.5	(31)	8	Pigeon Peas	9.5	(28)	9	Oats	14.2	(42)
9	Sausage	9.8	(29)					9	Milk	14.2	(42)
								9	Meat	14.2	(42)
								11	Tubers	12.2	(36)
								12	Chocolate	10.2	(30)

[1]usually contains shredded cabbage or lettuce plus sliced tomatoes

[2]rice and bean mixture

[3]usually contains plantain, various tubers, or squash plus small amount of meat or sausage

Table 8. Frequency of consumption of selected foods in the Plan Sierra region.

Food[1]	Daily		2-3/week		Occasionally		Never[2]	
	%	(N)	%	(N)	%	(N)	%	(N)
Kidney beans	95.6	(282)	3.4	(10)	-	-	-	-
Rice	92.9	(274)	5.4	(16)	0.7	(2)	0.3	(1)
Oil	96.6	(285)	1.4	(4)	-	-	0.7	(2)
Sugar	95.9	(283)	1.7	(5)	-	-	1.0	(3)
Bread	48.5	(143)	47.1	(139)	2.7	(8)	0.7	(2)
Spaghetti	22.7	(67)	72.9	(215)	3.0	(9)	-	-
Coffee	92.5	(273)	2.4	(7)	0.3	(1)	3.0	(9)
Eggs	33.2	(98)	54.9	(162)	10.2	(30)	0.3	(1)
Yuca (cassava)	26.4	(78)	60.0	(177)	11.2	(33)	1.0	(3)
Sweet potato	21.0	(62)	62.7	(185)	12.9	(38)	2.4	(7)
Plantain	13.6	(40)	65.4	(193)	18.0	(53)	2.0	(6)
Sausage	8.5	(25)	66.1	(195)	15.6	(46)	9.2	(27)
Milk	44.7	(132)	28.8	(85)	18.3	(54)	7.4	(22)
Pigeon Peas	6.1	(18)	66.1	(195)	24.7	(73)	1.7	(5)
Sweet banana	7.8	(23)	51.9	(153)	25.4	(75)	13.9	(41)
Cheese	2.4	(7)	56.9	(168)	28.8	(85)	11.2	(33)
Meat	2.7	(8)	54.9	(162)	40.3	(119)	1.0	(3)
Tomato	2.0	(6)	38.3	(113)	47.4	(140)	10.8	(32)
Guava	5.1	(15)	31.2	(92)	45.4	(134)	15.9	(47)
Corn	2.0	(6)	29.2	(86)	39.3	(116)	27.4	(81)
Orange	3.7	(11)	25.4	(75)	54.9	(162)	14.9	(44)
Cabbage	2.4	(7)	26.8	(79)	59.7	(176)	9.8	(29)
Lettuce	2.0	(6)	20.0	(59)	62.4	(184)	14.9	(44)
Avocado	2.4	(7)	17.3	(51)	63.0	(186)	16.3	(48)
Papaya	1.7	(5)	15.9	(47)	56.9	(168)	22.4	(66)
Fish (includes cod and herring)	-	-	-	(38)	12.9	(106)	48.5	(143)

[1]Foods are listed in order of combined daily and 2-3/week consumption

[2]Total may not equal 295 or 100% due to missing responses

respondants. Coffee, consumed daily by 92.5% of the respondants, was also not mentioned in the food recall probably because it was drunk between rather than with meals.

Rice and beans were consumed daily by 93-96% of the sample. Eggs were the most popular source of animal protein. They were eaten at least 2-3 times per week by 88.1% of the sample. Bread an/or spaghetti were each consumed daily or 2-3 times per week by 95.6% of the respondants. Yuca and sweet potatoes, the most popular vegetables, were consumed at least 2-3 times each week by approximately 85% of the sample. Plantain was eaten with the same frequency by 79.0%. Milk was suprisingly popular. Almost three-fourths consumed milk at least 2-3 times per week, including 45% who drank milk daily. Pigeon peas were also popular. Fruits, with the exception of sweet bananas, were seldom mentioned in the food recall and not reported as frequently eaten. Fruits were just beginning to come in season at the time of the survey although preserved guava and papaya are available year round. Tomatoes and guava were eaten several times a week by over 36% of the respondants but less than 30% ate avocados, papaya, or oranges regularly. Accoridng to the medical teams, mangos are freely consumed. They are, however, eaten out of hand whenever encountered and are not considered a "food". Cheese and meat were eaten several times a week by over half the sample. Good sources of Vitamin A, especially dark green leafy and deep yellow/orange vegetables were rarely included in the diet.

More food is purchased than grown. Yuca, corn, pigeon peas, sweet potatoes, plantain, and kidney beans are grown by 17% - 35% of the respondants. With the exception of kidney beans, these foods are most likely to be grown in Janico. Although home production of milk was low (14.7%), it occured significantly more often in Moncion. Eggs were produced by 42.6% of

all respondants but with significantly greater frequency in Moncion. Bread, spaghetti, sugar, oil, rice, and meat are purchased by over 90% of the respondants. Guava was the only food which more people grew than purchased.

Meat was the food most people (82.0%) wanted to consume that they were not able to obtain in sufficient quantity at the time of the survey. More milk and salad vegetables were desired by 52.5% and 44.1% of the respondants respectively. Only 17.3% wanted to consume more eggs, probably because most of these who wanted to consume eggs were able to do so. Only 15.2% would have liked to consume more fruits.

Most of the respondents thought that there were beneficial foods for pregnant or lactating women but only 33% - 40% thought that some foods were harmful at these times. Milk was named as the best food for pegnant women by 37.6% of the respondants. Meat was thought to be best by 27.5%. Fruits, eggs, and vegetables were infrequently named as the best food but were frequently mentioned as other good foods to eat during pregnancy. Milk, along with salted codfish, was also most popular as a food for lactating mothers. Meat, eggs, soups, and oatmeal were also thought to be important foods during lactation. Only one-third of the women thought that any foods were harmful to pregnant women. The majority of these women thought that soursop was the most harmful food. No other food was named as most harmful by 2% or more of the sample. There was less agreement about which foods ae harmful among the 38.8% of the sample who named a food as harmful during lactation. There was also a significant difference among communities. Over 50% of the women in San Jose de las Matas and Moncion thought some foods are harmful to women during lactation, but only 10% in Janico thought so. Avocado was the food most frequently mentioned, although carne puerco, tripe, pigeon peas, fish, and herring were also named.

Infant feeding practices

A high proportion of bottle feeding was found throughout the region. Although 68.8% of the mothers thought that maternal milk was the best food for children under 6 months of age, by 2 months of age 68.5% of the infants were receiving a bottle in addition to or instead of the breast. By 3 months of age 79.3% of the children received a bottle. Thos mothers who had bottles (77.6%) had an average of 2.1 bottles. The children received milk in a bottle an average of 3.9 times a day. Cow's milk (45.8%) or powdered milk (40.0%) was usually given in the bottle. Only 6.8% of the mothers said they never gave milk in a bottle. Mothers in San Jose de las Matas were more likely to breastfeed and less likely to bottlefeed than other mothers. The important of milk in the child's diet diminished greatly after 6 months. Between 6 months and 1 year only 40.0% of the mothers thought that milk was the best food for their child. This includes 15.9% who favored maternal milk. Between 1 and 3 years, only 15.2% of the mothers thought milk was the best food and no one mentioned it as best for children over 3 years of age (Table 9).

Supplemental foods, other than milk, were introduced around 5 months of age ($\bar{X}$ = 5.2+2.8 months). The most popular supplemental food was crema de habichuelas (sweetend puree of kidney beans with milk). Potato puree was also mentioned by over half the respondants. Eggs or egg yolks, meat, and fruit,--as compote, juice, or alone---were also given to children who were still receiving breast or bottle milk. Most children were weaned during the latter half of the first year ($\bar{X}$ = 10.3 months). By 1 year of age family food had replaced milk or weaning foods as the food mothers thought was best for their children.

The mothers definitely believed that a child with diarrhea should receive liquids other than milk. Lemonade was preferred by 55.2% of the women but

Table 9. Foods believed to be best for infants and young children in the Plan Sierra region.

Rank	Food	%	(N)
Best food for an infant 6 months of age			
1	Maternal milk	68.8	(203)
2	Powdered milk	4.4	(13)
3	Cow's milk	2.7	(8)
	Don't know	12.2	(36)
Best food for an infant 6 months - 1 year of age			
1.5	Cow's milk	18.0	(53)
1.5	Crema de habichuelas[1]	18.0	(53)
3	Maternal milk	15.9	(47)
4	Egg or egg yolk	9.2	(27)
5	Potato puree	8.5	(25)
6	Powdered milk	6.1	(18)
7	Family meal	5.4	(16)
8	Compote	4.7	(14)
	Don't know	5.1	(15)
Best food for a child 1-3 years of age			
1	Family food	41.4	(122)
2	Meat	10.8	(32)
3	Egg, egg yolk	11.2	(33)
4	Cow's milk	9.8	(29)
5	Powdered milk	5.4	(16)
	Don't know	7.5	(22)
Best food for a child 3 years of age			
1	Family food	45.1	(133)
2	Meat	21.7	(64)
3	Vegetables	5.4	(16)
4	Egg	3.7	(11)
	Don't know	20.7	(61)

fruit juices, soup, cola beverage, and tea were mentioned frequently. Milk was the food that most women (85.4%) would not give a child with diarrhea. All meals would be withheld by 24.7%, while others said they would not feed rice (19.0%) or kidney beans (14.9%), the staple foods for most families at noon. There was less concensus about what food to feed or withold from a child with fever. Various fruit juices were named by 45.0% of the respondants but milk, tea, soup, and soft drinks were also mentioned. Continuation of regular meals was thought to be best by 20.0%. However, 40.0% of the respondants would discontinue regular meals for a child with fever. Milk, rice, and beans would also be withheld by 20-25% of their mothers.

Nutritional status of the children

Mean age of the children was 31.5 months. There were 201 boys and 245 girls in the sample. Only 19.4% were still being breastfed. The remaining infants had usually been weaned between 8 and 9 months of life. Almost one half of the children had some degree of malnutrition but only 12.3% were moderately or severely malnourished. Weight/age by region are given in Table 10. Significant differences were observed between the 3 regions using the Chi square statistic (p.>005). Janico had more normal and above normal children than expected. San Jose de las Matas had fewer normal and mildly malnourished children than expected. Moncion had three times as many severely malnourished. When 80% of the reference standard is used to identify moderate malnutrition, as suggested by Jelliffe, 21.9% of the sample would be classified as moderately malnourished. There were 6.5% whose weight/age was greater than 110% of the NCHS standards.

Height/age reflects genetic potential but it can be used to indicate chronic undernutrition (Kanawati). When 95% of the reference standard is taken as the cutoff point, 73.4% of the children have a mild retardation of

Table 10. Percent deviation from normal weight/age of children in 3 zones served by the Plan Sierra, Dominican Republic, during April-May, 1980.[1]

Percent of Standard	Janico		San Jose de Las Matas		Moncion		Total	
	%	(N)	%	(N)	%	(N)	%	(N)
> 110	3.4	(15)	1.8	(8)	1.3	(6)	6.5	(29)
90-110	15.2	(68)	13.2	(59)	15.9	(71)	44.4	(198)
75-89	7.0	(31)	16.8	(75)	13.0	(58)	36.8	(164)
60-74	2.0	(9)	4.5	(20)	3.6	(16)	10.1	(45)
< 60	0.4	(2)	0.4	(2)	1.3	(6)	2.2	(10)
Total	28.0	(125)	36.7	(164)	35.1	(157)	100.0	(446)

[1] compared to National Center for Health Statistics (NCHS) standards.

height. If long-term severe undernutrition is represented by 85% of the standard, as suggested by Neuman, 17.8% of the children suffer chronic severe undernutrition.

The effectiveness of the Ministry of Public Health immunization program as carried out by the local health promotors is shown in Table 11. Three-fourths of the children have received one or more injection of DPT and Polio vaccine. Only 22.2% have received the measles vaccination. As shown in table 12, only in Moncion is the number of vaccinated children greater than the number of children who have had the measles. BCG vaccinations ranged from 20.2% of the population in Janico to 62.8% in San Jose de las Matas. BCG is usually given at birth to prevent tuberculosis. Although only 41.4% of the total sample had been vaccinated, no history of tuberculosis was reported.

Colds were the most frequent cause of childhood illness. Almost every child (93.2%) had had one or more colds. Illness related to an unsanitary environment was also common. At least 41% had had lice and 39% parasites at least once.

At the time of the study 12.5% of the children had diarrhea. Slightly over one-third (37.0%) had had diarrhea during the past week. These episodes had lasted for an average of 3 - 4 days. There was no correlation between having diarrhea or frequency of diarrhea and weight/age, height/age, or any of the socioeconomic variables.

The number of clinical signs of malnutrition observed by the physicians did not correlate with the incidence of malnutrition as determined by anthropometric measurements. With the exception of paleconjunctiva and angular stomatitis, 84% of all clinical signs were detected in Moncion. Although only 13.9% of the children in Moncion were severely or moderately malnourished according to their weight/age, 25.9% had edema. Janico had

Table 11. Number of immunizations received by children in the Plan Sierra region.

Zone	Children Examined	BCG		Measles		Typhus		DPT		Polio	
		%	(N)	%	(N)	%	(N)	%	(N)	%	(N)
Janico	125	19.2	(24)	8.8	(11)	2.4	(3)	75.2	(94)	74.4	(93)
San Jose de Las Matas	164	56.7	(93)	20.1	(33)	0.6	(1)	65.2	(107)	61.0	(100)
Moncion	157	35.0	(55)	30.6	(48)	0.6	(1)	72.6	(114)	76.4	(120)
Total	446	38.6	(172)	20.6	(92)	1.1	(5)	70.8	(316)	70.2	(313)

Table 12. Comparison of number of children having had measle immunization with number having had measle illness in the Plan Sierra region.

Zone	Children Examined	Had Measle Immunization		Had Measle Illness	
		%	(N)	%	(N)
Janico	125	8.8	(11)	14.4	(18)
San Jose de Las Matas	164	20.1	(33)	25.6	(42)
Moncion	157	30.6	(48)	15.9	(25)
Total	446	20.6	(92)	19.1	(85)

significantly more children with pale conjunctiva than the other two regions. Likewise, San Jose de las Matas had significantly more signs of angular stomatisis. Bilateral scars of angular stomatisis were detected in 11.6% of the total sample but current signs were found in only 1.7%. These inconsistencies in clinical findings suggest a difference in criteria for diagnosis among the physicians. The diagnosis of clinical signs of malnutrition is subjective and difficult to make accurately.

IV. SUMMARY AND DISCUSSION

The incidence of moderate and severe malnutrition in the area of the Dominican Republic served by the Plan Sierra is less than expected. The findings of the Plan Sierra nutrition survey are compared to those of Sebrell (1972) and Caritas as reported by Rondon (1980) in Table 13. The results of Sebrell's nationwide study and Caritas' study of the Cibao were similar and differed significantly ($p. > .005$) from the Plan Sierra study. When 80% of the NCHS standard was used in the Plan Sierra Study to differentiate moderate from mild malnutrition, as suggested by Jelliffe, 21.9% of the children were classified as moderately malnourished. This suggests that many of the children (36.8%) who are mildly malnourished according to Gomez are actually closer to more severe malnutrition than to normal status. A small number of obese children (6.5%) was also found. The high incidence of growth retardation (55.6%) and stunting (17.8%) is another indication of chronic undernutrition.

Very few clinical signs of malnutrition were observed except in Moncion. Although very little consumption of Vitamin A rich foods was reported, virtually no clinical signs of Vitamin A deficiency were observed. There was a discrepency between the number of cases of edema and severe malnutrition reported. In Moncion children were classified as normal according to Gomez but were also listed as having edema.

Health promoters in each community are backed up by 5 rural clinics. Three of the clinics have modern facilities and the other two have new buildings under construction. Physicians, dentists, nurses, and a lab technicians are assigned to each clinic. There is a large regional hospital in Santiago for more severe cases.

Table 13. Comparison of nutritional studies in the Dominican Republic.

Degree Malnutrition[1]	Sierra, 1980		Caritas, 1976[2]		Sebrell, 1972[3]	
	%	(N)	%	(N)	%	(N)
Normal	51.1	(198)	32.0	(878)	25.0	(271)
First-degree	36.6	(164)	44.0	(1198)	49.0	(536)
Second-degree	10.3	(46)	21.0	(592)	23.0	(249)
Third-degree	2.0	(9)	3.0	(95)	4.0	(44)
Total	100.0	(448)	100.0	(2763)	101.0[4]	(1100)

[1] according to Gomez, 1956

[2] Rondon, 1980

[3] Sebrell, 1972

[4] difference due to rounding error

Most of the households contain nuclear families with approximately 4 children. The majority of the men are farmers cultivating less than half of the 20 tareras they own. The houses are small, made of wood siding with zinc or thatched roofs and cement floors, and without running water or electricity. Most families use a latrine and draw water from a stream or river. The women are primarily housewives. They tend to be slightly better educated than the men although both are likely to have completed around 3 years of school.

There is evidence of some affluence now and a potential for economic growth. One-fourth of the families had piped water in their homes and 10% had electricity. Approximately 13% of the men and 15% of the women were engaged in occupations that required a skill or formal education.

Almost all of the respondants ate three meals a day. Breakfast usually included a bread or cereal and/or plantain or a tuber. Over one-fourth had milk and/or an animal source of protein. Rice with kidney beans or pigeon peas were eaten by almost everyone at midday. Vegetables, including salad vegetables, tubers, and plantain, were consumed by only 18% of the respondants. Less than 20% had an animal source of protein. Half of the families had plantain or some type of tuber or squash for the evening meal. Over one-third also had a bread/cereal product and/or an animal source of protein. Soups or other dishes combining plantain, tubers and some animal protein were also popular.

The consumption of eggs and meat was higher than expected. Milk was drunk daily by almost half of the families. Fruits were just coming into season and were only available about four months during the year. They were rarely mentioned on the food recalls and it was estimated that with exception of yellow bananas and mangos they were not regularly consumed by about 80% of

the families. Vegetables were more popular than fruits. Plantain, yuca, sweet potato, cabbage, lettuce, and tomatoes were the most popular vegetables. No green leafy or deep yellow vegetables, good sources of vitamin A, were mentioned. Two of the families said they never ate meat, milk, or eggs but 10-20% did not eat fruits or vegetables.

Mothers were more likely to have definite beliefs about foods they should eat during pregnancy than during lactation. Meat, milk, and eggs were the foods thought to be best during pregnancy. Soursop was the only food that was thought to be harmful to pregnant women.

There was less agreement about beneficial foods during pregnancy. Although milk, salted cod and meat were popular, no one food was mentioned by at least half of the women. Less than 40% thought that any food was harmful during lactation. None of the women indicated a belief that food intake should be increased during pregnancy or lactation.

Although most of the mothers said that maternal milk was best for children less than 2 months of age, the majority of the children were receiving a bottle by 2-months of age. Children who received a bottle, received it 3-4 times a day, indicating that breastfeeding stopped when bottle feeding started. Most children were weaned by 10 months of age.

Crema de habichuelas (sweetened bean puree with milk), potatoe puree, and eggs were the first supplemental foods fed infants. These were introduced at about 5 months of age. By 1-year of age almost half of the children were receiving regular family food.

Most of the women thought that fruit juices, especially lemon juice, and other liquids should be given to children with diarrhea. Milk was usually withheld. Dietary treatment for children with fever was not as well defined. Juices, milk, soups, tea, and regular family food were about equally popular.

Family food was most likely to be withheld although some would not feed rice, beans, or milk to a child with fever.

The women may not be applying these beliefs about the best foods for pregnant and lactating women and young children. Although the women had an average of 5.8 pregnancies, they delivered an average of 5.1 live children and had an averge of 4.3 living children. The early switch to bottle feeding, despite a belief that mother's milk is best for an infant, may be due to the mothers inability to produce sufficient milk. No information is available on mother's weight gain during pregnancy nor on birthweights of their infants.

Interest in improving current living conditions is shown by the large number of active women's clubs in the region. The application of nutrition and health information available through the media may be responsible for many of the positive food practices identified by the study. However, opportunities for formal education in nutrition or other topics relating to improving family life are almost non-existant. There is no university program granting degrees in nutrition or home economics in the Dominican Republic. High schools seldom teach home economics courses. Women are admitted to the agricultural engineering program at the Institute Superior de Agricultura (ISA) where they receive courses in nutrition and agricultural education. Other universities have programs in education, social work, or health occupation but there is no program to train personnel to work with rural women in a non-formal education setting.

The Plan Sierra has the potential to develop a non-formal education program for women that (1) will improve the nutritional status and standard of living of families in the region and (2) can serve as a model for such a program in the entire country. ISA has the capacity to develop a program to train personnel to work with women in a non-formal education program.

V. RECOMMENDATIONS

1. The nutrition problem should be addressed through and educational rather than a health intervention.

   Chronic undernutrition is the main problem in the region served by the Plan Sierra. An education program can help improve current conditions and prevent future undernutrition.

2. An education program similar to extention programs in the United States should be developed.

   The causes of malnutrition are so varied and interrelated that an education program helping women to improve family food practices, to increase variety and quantity of food available, and to learn better sanitation and health practices will have a positive effect on the nutritional status of the entire family.

3. A second technical education program at the post-secondary level should be established to train personnel to work in an extention-type education program.

   An education program will have no long-term permanent effect unless there are sufficient, well-trained personnel to work in the program.

4. The small incidence of severe malnutrition present in the region should be treated in the rural public health clinics.

   There are sufficient clinics existing or under construction to provide primary care for the small number of severely malnourished children.

5. Medical personnel should receive additional training in the identification and treatment of malnutrition.

Discrepencies found in the physical examinations of the children can be eliminated through inservice nutrition education of the physicians and other medical personnel.

VI. IMPLEMENTATION

Plans for an extension education prgoram for rural women should be developed with input from Plan Sierra officials; subject matter specialists in fields such as nutrition, foods and food preservation, child development, and family economics; extension personnel with experience in developing countries and representatives from the Office of Nutrition and Women-In Developmen (AID) and the Office of International Cooperation and Development (USDA). Planning for the establishment of a technical education program for training of field workers should be concomittant with planning for the extension education program and should include representatives of ISA. A conference or workshop is suggested as the most efficient means of developing plans for the project. The outcome of the workshop should be a project proposal for the extension education and the technical education programs that 1) identify content areas to be addressed in the education program; 2) establish guidelines for the development of educational materials; 3) identify key personnel necessary for the implementation of the program; 4) develop a timeline for implementation; and 5) develop preliminary budgets.

Dr. Haydee Rondon, Director of the Nutrition Division, SESPAS, is aware of the need for in-service nutrition education for physicians and other medical personnel. Her office initiated a series of regional nutrition workshops in July 1980. Dr. Rondon should be encouraged in her efforts to develop further in-service nutrition programs for physicians.

REFERENCES

Gomez, F. Ramos-Galvan, R., Frenk, S. Cravioto, J. M., Chavez, R., and Vasquez, J. 1956, Mortality in third-degree malnutrition, J. Trop. Pediatr. 2:77.

Jelliffee, D. B., 1966, Assessment of Nutritional Status of the Community, Monograph Vol. 53, WHO, Geneva.

Kanawati, A. A., 1976, Assessment of nutritional status in the community, In O. S. McLaren (ed.) Nutrition and the Community. London, John Wiley and Sons.

Neuman, Charlotte G., 1979, Reference data. In D. B. Jelliffee and E. F. P. Jelliffe (eds.) Human Nutrition: A Comprehensive Treatise, Vol. 2. Plenum Press, New York.

Rondon, Haydee, 1980, Taller Regional de Nutricion Ministry of Public Health and Social Service, Santo Domingo, Dominican Republic.

Sebrell, W. H., 1972, Nutritional status of middle and low income groups in the Dominican Republic, Archivos Latinoamericas de Nutricion. 22: numero especial, July.

Zerfas, Alfred J., 1979, Anthropometric field methods: General. In Jelliffe, D. B. and E. F. P. Jelliffee (eds.) Human Nutrition: A Comprehensive Treatise, Vol. 2, Plenum Press, New York.

DOMINICAN REPUBLIC.
CROSS FILE SURVEYS: NUTRITION

#_____

EXAMEN CLINICO DE LOS NIÑOS

Fecha_____ Comunidad_____ 1 2

Nombre de la madre_____ Número_____ 3 4 5

Nombre del niño_____ Número_____ 6

1. Fecha de nacimiento_____

   Verificado

   Si 244/2 (58.4) (1) 7

   No 172 (41.5) (2)

2. Edad (meses)_____ 8 9

3. Sexo masculino 188 (45.5) (1)

   femenino 225 (54.4) (2) 10

4. Está Ud. danto el seno

   Si_____ (1)

   No_____ (2) 11

   Si es no a qué mes dejó de darle?_____ 12 13

SALUD

5. Ha tenido el niño:

Enfermedad	Ha tenido		Cuantas Veces			
Sarampión	Si 85 (20.5) (1)	No____(2)	14	____	15	____
Piodermitis	Si 170 (41.0) (1)	No____(2)	16	____	17	____
Bronconeumonía	Si 63 (15.2) (1)	No____(2)	18	____	19	____
Resfriado	Si 387 (93.2) (1)	No____(2)	20	____	21	____
Parasitismo	Si 162 (39.0) (1)	No____(2)	22	____	23	____

Otras enfermedades ha tenido		Cuantas Veces	
_____	24 ☐	_____	25 ☐
_____	26 ☐	_____	27 ☐
_____	28 ☐	_____	29 ☐
_____	30 ☐	_____	31 ☐
_____	32 ☐	_____	33 ☐

6. Tiene el niño diarrea ahora?

Si 52 (12.5) (1)

No _____ (2) 34 ☐

7. En cuántos días de la última semana ha tenido el niño diarrea?

_____ 35 ☐

8. Cada qué tiempo ha sufrido su niño diarrea?

Todavía _____ (1)

Cada semana _____ (2)

Cada tres meses _____ (3)

Cada seis meses _____ (4)

Casi nunca _____ (5)

Cada mes _____ (6) 36 ☐

VACUNACIONES

BCG	172 (41.4)	(1)	_____ (2)	37 ☐
Sarampión	92 (22.2)	(1)	_____ (2)	38 ☐
Tifus	5 (1.2)	(1)	_____ (2)	39 ☐
DPT	316 (76.1)	(1)	_____ (2)	40 ☐
Poliomelitis	313 (75.4)	(1)	_____ (2)	41 ☐

EXAMEN CLINICO

Chequee todas las condiciones que tiene el niño. Si todos los signos son negativos pase por la pregunta 5

1. Pelo

Fino y mal distribuido	26	42
Se le cae con facilidad	10	43
Próximo despigmento.....	1	44
"Flag" despigmento.....	2	45

2. Ojos

Conjuntivitis.....	95 22.9%	46
Xerosis	2	47
Bitot's spots	—	48
Xeroptalmia	2	49

3. Piel

"Flak paint" desquamación (como kwashiorkor)...	—	50
Follicular hyperkeratois	32	51
Petequias	—	52

4. Boca

Swollen gums	1	53
Felliform-papillary		54
~~Glositis~~.....		55
Chelosis	33	56

Angular stomatitis

Ahora_____(1) Cicatriz_____(3)

5. Todos los signos son negativos 8.02 (54.7) 57

6. Edema

Si _____ (1) No _____ (1) 58

COMENTARIOS DEL MEDICO

ANTROPOMETRIA

Peso _____ lbs (hasta cuarta libra 59 60 61 62

Length (menores de 3 años) _____ cm 63 64 65

Height (mayores de 3 años) _____ cm 66 67 68

Circunferencia de la cabeza _____ cm 69 70 71

Circunferencia del brazo _____ cm 72 73 74

Grado de desnutrición (Gómez) _____ 75

Gomez

	Jamaica	Louisiana	Mexico	Total %
Normal	70	82	76	228 (54.9)
1°	36	47	52	135 (32.5)
2°	11	17	19	47 (11.3)
3°	2	2	1	5 (1.2)
Total	119	148	148	415

$X^2 = 4.0$ df = 6

Not sig

PESO / EDAD

	JANICO	LAS MATAS	MONCION	TOTAL N	TOTAL (%)
>110	15	9	7	31	(6.9)
90-110	68	59	71	198	(44.2)
75-90	31	75	58	164	(36.6)
60-75	9	20	17	46	(10.3)
<60	2	2	5	9	(2.0)
	125	165	158	448	

$X^2 = 1.04$ $df = 8$ not sig

			SIERRA 1980 (%)	CARITAS CIBAO 1976 (%)	SEBROL 1969 (%)
NORMAL	=	(198)	44.2 %	32	25
1°	=	(164)	36.6 %	44	49
2°	=	(46)	10.3 %	21	23
3°	=	(9)	2.0 %	3	4

$X^2 = 111.3$ $df = 6$ sig .005

ALTURA / EDAD

	JANICO	LAS MATAS	MONCION	TOTAL N	%
NORMAL	69 55.2	64 38.8	81 51.3	214	
80-94	49 39.2	88 53.3	69 43.7	206	
<80	7 5.6	13 7.9	8 5.1	28	
	125	165	158	448	

$X^2 = 7.3$ $df = 4$ NOT SIG

PESO / ALTURA

	JANICO	LAS MATAS	MONCION	
>110	43 34.4	46 27.9	24 15.2	113
NORMAL 90-110	75 60.0	98 59.4	97 61.4	270
10 80-90	4 3.2	8 4.8	16 10.1	28
20 75-85	3 2.4	9 5.5	15 9.5	27
30 <75	- -	4 2.4	6 3.8	10
	125	165	158	448

$X^2 = 28.0$ $df = 8$ SIG .005

Pleo / Edad

	<60	60-75	75-90	90-110	>110
JANICO	2	9	31	68	15
LAS MATAS	2	20	75	59	9
MONCION	5	17	58	71	7
TOTAL (N)	9	46	164	198	31
%	2.0	10.3	36.6	44.2	6.9

48.9

altura / edad

	<80	80-94	94-105	>105
JANICO	7	49	63	6
LAS MATAS	13	88	60	4
MONCION	8	69	76	5
TOTAL (N)	28	206	199	15
%	6.2	46.0	44.4	3.3

52.2

Population

	<75	75-85	86-90	90-110	110-120	>120
JANICO	0	3	4	75	31	12
LAS MATAS	4	9	8	98	33	13
MONCION	6	15	16	97	16	8
TOTAL (N)	10	27	28	270	80	33
%	2.2	6.0	6.2	60.3	17.8	7.4

_____

INFORMACIONES SOBRE NUTRICION EN LA SIERRA

CUESTIONARIO PARA LAS MADRES

FECHA _____ COMUNIDAD _____ 1 2 (1)

nombre _____ No. _____ 3 4 5 6

COMPOSICION FAMILIAR:

(Sólo los que viven en la casa)

	SEXO	EDAD	EDUCACION	OCUPACION
a. Esposo		8	9 10	11 12
b. Usted		13 14	15 16	17 18
c. Hijos (comenzar con el mayor)	19	20 21	22 23	24 25
	26	27 28	29 30	31 32
	33	34 35	36 37	38 39
	40	41 42	43 44	45 46
	47	48 49	50 51	52 53
	54	55 56	57 58	59 60
	61	62 63	64 65	66 67
	68	69 70	71 72	73 74
	75	76 77	78 79	7 8 1 2 3 4 5 6
d. Otras Personas	9	10 11	12 13	14 15 (2)
	16	17 18	19 20	21 22
	23	24 25	26 27	28 29
	30	31 32	33 34	35 36
	37	38 39	40 41	42 43 44 45

LA CASA DE LA FAMILIA

1. ¿Es propia su casa?

Si_____(1) No_____(2) 46

2. ¿De qué material están construidas las paredes de su casa?

Bloks_____(1)
Tablas_____(2)
Palitos_____(3)
Yagua_____(4)
Otros (especifique ( ) 47

3. ¿De qué material está contruido el techo)

Zinc_____(1)
Canas_____(2)
Tablitas_____(3)
Yagua_____(4)
Otros (especifique ( ) 48

4. ¿De qué material está construido el piso?

Cemento_____(1)
Tablas_____(2)
Ceniza_____(3)
Suelo (tierra)___ (4)
Otros (especifique ( ) 49

5. ¿Cuántas habitaciones tiene su casa?_____ 50

6. ¿Tiene electricidad en su casa?

Si_____(1) No_____(2) 51

7.a¿Cómo recibe el agua en su casa? (¿Cómo llega a su casa?)

La carga a mano desde el manantial....._____(1)
La carga a mano desde el río....._____(2)
La saca del pozo a mano....._____(3)
La saca del pozo con polea....._____(4)
Tiene llave en la casa (agua corriente)....._____(5)
Otros (especifique)....._____( ) 52

b- ¿Hierve Ud. el agua para tomar?

Si_____(1) No_____(2) 53

8. ¿Qué facilidades sanitarias posee?

Ninguna ..... _____(1)

Zanjón o empalizá..... _____(2)

Caseta, letrina (servicio) con hoyo _____(3)

Letrina (servicio) de cemento o pozo séptico ..... _____(4)

Inodoro..... _____(5)

Otros (especifique)..... _____( ) 54

9. ¿Qué usa para cocinar?

Fogón en el suelo..... _____(1)

Fogón parado..... _____(2)

Anafe..... _____(3)

Estufa..... _____(4)

Otros (especifique)..... _____( ) 55

LA TIERRA DE LA FAMILIA

10. ¿Su familia tiene predio o parcela? (conuco)

Si_____(1) No_____(2) 56

Es heredada_____(1) Arrendada_____( )

Pentada_____(3) Propia_____(4)

Otros_____( ) 57

11. ¿Cuántas tareas de tierra posee?_____ 58 59 60

12.¿ Cuántas tareas de tierra cultiva?_____ 61 62

13 ¿Cultiva para consumo de la familia_____(1)

Para venta_____(2) Consumo/venta_____(3) 63

14 ¿Cuáles son los cultivos principales (nombre no más de 5)

Café 44 (14.9)* (1) Plátanos 65 (22.0) (7) 64 65

Maíz 96 (32.5) (2) Guineo 30 (10.2) (8) 66 67

Yuca 141 (47.8) (3) Maní 8 (2.7) (9) 68 69

* POR CIENTO DE TODA MUESTRA (295)

Cont. Pag. 3

71 (24.1)
Habichuelas ______ (4)   Papas / (.34) (10)   70 71

Guandules 63 (21.4) (5)   Hortalizas 2 (.7) (11)   72 73

Batata 71 (24.1) (6)   Bija — (12)   74 75

Otros ______ ( )

1 2 3 4 5 6 (3)

TABACO 18 (6.1)
PASTOS 1 (.34) (forrage para animales)
ARROZ 1 (.34)
CAÑA 7 (.34)

ALIMENTOS

15. ¿Cuántas comidas al día acostumbra comer su familia? _____ 7 ☐

	DE LOS ALIMENTOS ENUMERADOS CUALES CONSUME SU FAMILIA?				ALIMENTOS QUE SE CONSUMEN PROCEDENCIA.			
	A DIARIO	ALGUNAS VECES	OCASIONAL-MENTE	NUNCA	PRODUCCION PROPIA	COMPRA	OTRAS FUENTES	
Maíz	4	3	2	1	8 ☐	3	2	1 9 ☐
Arroz	4	3	2	1	10 ☐	3	2	1 11 ☐
Habichuelas	4	3	2	1	12 ☐	3	2	1 13 ☐
Guandules	4	3	2	1	14 ☐	3	2	1 15 ☐
Plátano	4	3	2	1	16 ☐	3	2	1 17 ☐
Yuca(casabe)	4	3	2	1	18 ☐	3	2	1 19 ☐
Batata	4	3	2	1	20 ☐	3	2	1 21 ☐
Guineo amarillo	4	3	2	1	22 ☐	3	2	1 23 ☐
Repollo	4	3	2	1	24 ☐	3	2	1 25 ☐
Lechuga	4	3	2	1	26 ☐	3	2	1 27 ☐
Leche	4	3	2	1	28 ☐	3	2	1 29 ☐
Queso	4	3	2	1	30 ☐	3	2	1 31 ☐
Huevos	1 / .34 4	30 / 10.3 3	162 / 55.7 2	98 / 33.7 1	32 ☐	121 / 42.6 3	155 / 54.6 2	8 / 2.8 1 33 ☐
Tomate	32 / 11.0 4	140 / 48.1 3	113 / 38.8 2	6 / 2.1 1	34 ☐	19 / 7.5 3	208 / 81.9 2	27 / 10.6 1 35 ☐
Naranja	44 / 15.1 4	162 / 55.5 3	75 / 25.7 2	11 / 3.8 1	36 ☐	47 / 19.3 3	161 / 66.3 2	35 / 14.4 1 37 ☐
Aguacate	48 / 16.4 4	186 / 63.7 3	51 / 17.5 2	7 / 2.4 1	38 ☐	52 / 22.3 3	128 / 54.9 2	53 / 22.8 1 39 ☐
Lechosa	66 / 23.1 4	168 / 58.7 3	47 / 16.4 2	5 / 1.8 1	40 ☐	40 / 16.4 3	116 / 53.5 2	61 / 28.1 1 41 ☐
Guayaba	47 / 16.3 4	134 / 46.5 3	92 / 31.9 2	15 / 5.2 1	42 ☐	90 / 38.3 3	70 / 29.8 2	75 / 31.9 1 43 ☐
Salchichón	27 / 9.2 4	46 / 15.7 3	195 / 66.6 2	25 / 8.5 1	44 ☐	4 / 1.5 3	254 / 96 6 2	5 / 1.9 1 45 ☐

Carne	3 4 / 1.0	119 3 / 40.8	162 2 / 55.5	8 1 / 2.7	46	10 3 / 3.5	274 2 / 96.1	1 1 / .35	47
Pescado	143 4 / 49.8	106 3 / 36.9	38 2 / 13.2	— 1 / —	48	6 3 / 4.0	135 2 / 88.8	11 1 / 7.2	49
* Spaguettys	— 4	9 3 / 3.1	215 2 / 73.9	67 1 / 23.0	50	— 3 / —	285 2 / 100	— 1 / —	51
* Pan	2 4 / .7	8 3 / 2.7	139 2 / 47.6	143 1 / 49.0	52	1 3 / .4	286 2 / 99.3	1 1 / .4	53
* Azúcar	3 4 / 1.0	— 3 / —	5 2 / 1.7	283 1 / 97.2	54	3 3 / 1.0	285 2 / 99.0	— 1 / —	55
* Aceite	2 4 / .7	— 3 / —	4 2 / 1.4	285 1 / 97.9	56	3 3 / 1.0	285 2 / 99.0	— 1 / —	57
* Café	9 4 / 3.1	1 3 / .3	7 2 / 2.4	273 1 / 94.1	58	24 3 / 8.5	257 2 / 91.1	1 1 / .4	59

16. ¿Qué desayunó usted ayer?

LECHE 108 (36.6) — 60 61
PAN 98 (33.2) — 62 63
HUEVOS 87 (29.5) — 64 65
PLATANO 85 (28.8) — 66 67
AVENA 63 (21.3) — 68 69
YUCA 56 (19.0) — 70 71
BATATA 54 (18.3) — 72 73
SPAGUETTIS 31 (10.5) — 74 75
SALCHICHON 29 (9.8) — 76

No desayunó 8 (2.7%)

17. ¿ Qué comió usted ayer?

ARROZ — 77 78
HABICHUELA — 79 80
CARNE 102 (34.6) — 1 2 3
SPAGUETTIS 82 (27.8) — 2 8
ENSALADA 68 (23.0) — 9 10
MAIZ 52 (17.6) — 4 5 6 (4)
BROCOLI 30 (10.2) — 11 12
CUAJADA 28 (9.5) — 13 14
— 15 16
— 17 18
— 19 20
— 21 22

No comió 1 (.34%)

18. ¿Qué cenó Ud. ayer?

PLATANOS 128 (43.4) — 24 25
HUEVOS 114 (38.6) — 26 27
SPAGUETTIS 102 (34.6)
YUCA 94 (31.9)
SOPA 82 (27.8)
PAN 60 (20.3)
BATATA 50 (16.9)
AVENA 42 (14.2)
LECHE 42
CARNE 42 (14.2)
VIVERES (TUBERES) 36 (12.2)
CHOCOLATE 30 (10.2)

28 29 _____ 30 31 _____

32 33 _____ 34 35 _____

36 37 _____ 38 39 _____

40 41 _____ 42 43 _____

No cenó 6 (2.0%) 44

19. ¿Qué alimentos le gustaría comer y qué Ud. puede obtener? (No hay o no tiene dinero).

CARNE 242 (82.0)
LECHE 155 (52.5) 45 46
* VERDURAS 130 (44.1)
HUEVOS 51 (17.3) 49 50

FRUTAS 45 (15.2)
PLATANO 41 (13.9) 47 48
PESCADO 33 (11.2)
_____ 51 52

ALIMENTOS PARA LAS MADRES

20. ¿Está Ud. embarazada?

Si 28 (9.7%) (1)

No 260 (90.3%) (2) 53

21 ¿Cuántas veces ha estado embarazada_____ 54 55

22. ¿Cuántos niños ha tenido que han nacido vivo?

_____ 56 57

23 ¿Cuántos de esos niños viven?_____ 58 59

24. ¿Hay alimentos que hacen daño a la mujer embarazada?

Si 95 (33.0) (1)

No 192 (66.7) (2) 60

NO SABE 1 (.4)

Si es así cual es el más dañino?_____ 61 62

Cuales son los otros alimentos dañinos?

GUANABANO 11 (3.7)
HABICHUELA 8 (2.7) 63 64
ARROZ 8 (2.7)
NO SABE 26 (8.8) 65 66

* VERDURAS DE ENSALADA = LECHUGA, CEBOLLA, TOMATE

_____ 67 68 _____ 69 70

25. ¿Cuál es el alimento más importante que una mujer embarazada debe comer?

_____ 71 72

¿Cuáles son los otros alimentos importante que una mujer embarazada debe comer?

CARNE 162 (54.9) 73 74 _____ 75 76
HUEVO 136 (46.1)
LECHE 119 (40.3) 77 78 _____ 79 80
FRUTA 93 (31.5)
VERDURA 90 (30.5)

26. ¿Hay alimentos que una mujer en lactancia no debe comer 1 2 3 (5

Si 109 (38.8) (1) 4 5 6

No 171 (60.8) (2)

NO SABE 1 (.4) 7

Si es así, cual es el más dañino?

_____ 8 9

Cuáles son otros alimentos dañinos?

AGUACATE 31 (10.5)
CARNE PUERCO 19 (6.4) 10 11 _____ 12 13
GUANDUL 15 (5.1)
MONDONGO (TRIPA) 14 (4.7) 14 15 _____ 16 17
NO SABE 10 (3.4)

27. ¿Cuál es el alimento más importante que una mujer debe comer mientras está lactando?

_____ 18 19

Cuáles son otros alimentos importantes?

CARNE 96 (32.5)
LECHE 78 (26.4) 20 21
AVENA 62 (21.0)
HUEVOS 61 (20.7) 24 25
SOPA 58 (19.7)

BACALAO 56 (19.0)
VERDURAS 48 (16.3)
CHOCOLATE 37 (12.5) 22 23
ARROZ 36 (12.2)
FRUTAS 29 (9.8) 26 27
NO SABE 9 (3.0)

ALIMENTOS PARA LOS NIÑOS

28. ¿Cuántos meses Ud. lacta su niño? _____ 28 29

29. ¿A cuántos meses comienza a darle leche en biberon?

_____ 30 31

30. ¿A cuántos meses le da otro alimento?_____ 32 33

31. ¿Además de leche cuál es el primer alimento que Ud. le da a su niño?_____ 34 35

¿Qué otros alimentos Ud. le da a su niño mientras el es lactado o toma biberon?

PURE DE PAPA 119 (40.3)
CREMA DE HABICHUELAS 92 (31.1) 36 37
HUEVOS 64 (21.7)
CARNE 64 (21.7)
COMIDA 60 (20.3) 40 41
JUGOS 56 (19.0)
FRUTAS 52 (17.6)

SOPA 44 (14.9)
VERDURAS 36 (12.2) 38 39
ARROZ 33 (11.2)
YEMA DE HUEVO 26 (8.5) 42 43

32. Cuántos biberones tiene?_____ 44

33. Cuántas veces diario el niño toma leche en biberon?

_____ 45

34. ¿Cuál es el mejor alimento para niños:

a) Menores de 6 meses_____ 46 47

b) 6 meses hasta 1 año_____ 48 49

c) 1 año hasta 3 años_____ 50 51

d) Mayores de 3 años_____ 52 53

35. ¿Qué clase de leche le da en el biberon?

Carnation 5 (1.8) (1)

Vaca 126 (45.8) (2)

Chiva 34 (12.4) (3)

En polvo 110 (40.0) (3)

Otros (especifique_____ ( ) 54

NO DA LECHE EN BIBERON 20
(6.8% de todo)

36. ¿Cuáles alimentos Ud. deberá darle al niño que tiene diarrea?

JUGO DE LIMON 163 (55.2) — OTROS JUGOS (62) (21.0) NARANJA, [illegible] UVA, MANZANA

JUGOS 68 (23.0) 55 56 — 57 58

SOPA 68 (23.0)

PEPSI COLA 66 (22.4) 59 60 — NO SABE 9 (2.4)

TE DE HOJAS 35 (11.7)

37. ¿Cuáles alimentos no debe Ud. darle al niño que tiene diarrea?

LECHE 252 (85.4)

COMIDA (NINGUNO) 73 (24.7) 61 62 — 63 64

ARROZ 56 (19.0)

HABICHUELA 44 (14.9) 65 66

NO SABE 7 (2.4)

38. ¿Cuáles alimentos U.d debería darle al niño que tiene fiebre?

JUGOS 80 (27.1) — JUGO DE LIMON O NARANJA 53 (18.0)

LECHE 71 (24.1) 67 68 — PEPSI COLA O REFRESCO 34 (11.5) 69 70

SOPA 59 (20.0)

NADA COMIDA 59 (20.0) 71 72 — NO SABE 9 (3.0)

TE DE HOJAS 51 (17.3)

39. ¿Cuáles alimentos Ud. no debe darle a un niño que tiene fiebre?

COMIDA (NINGUNO) 118 (40.0)

LECHE 25.4 73 74 — 75 76

ARROZ 68 (23.0)

HABICHUELA 59 (20.0) 77 78

NO SABE 22 (7.4)

SECRETARIA DE ESTADO DE SALUD PUBLICA Y ASISTENCIA SOCIAL

DIVISION DE NUTRICION

PROGRAMA DE ENSEÑANZA DE NUTRICION PARA PROMOTORAS DE SBS Y MADRES

HORA	LUNES	MARTES	MIERCOLES	JUEVES	VIERNES
8-9 A.M.	LLEGADA AL CERN PRUEBA DE RECONOCIMIENTO	APRENDER A RECONOCER LOS SIGNOS CLINICOS DE LA DESNUTRICION	APRENDER A PESAR Y MEDIR LOS NIÑOS. RECONOCER LOS GRADOS DE DESNUTRICION COLOR AMARILLO I ROSADO II, ROJO III	APRENDER A USAR LA GRAFICA DE CRECIMIENTO	APRENDER A HACER HUERTO.
9-10 10-11	DEBERES DE LAS PROMOTORAS EN EL CERN	APRENDER A TOMAR TEMPERATURA	ENSEÑARLE HABITOS DE HIGIENE	ENSEÑAR HABITOS DE ALIMENTACION ADECUADA.	ENSEÑAR A PREPARAR UN SUERO CASERO.
11-12	DEBERES DE LAS MADRES EN EL CERN	BAÑAR Y CUIDAR LOS NIÑOS. RECONOCER UN NIÑO NORMAL. (PESO Y TALLA)	ENSEÑAR LOS NIÑOS A COMER.	ENSEÑAR HABITOS DE HIGIENE.	ENSEÑAR CONTROL DE INFECCIONES PREVENIBLES
1:00.	ALMUERZO	ALMUERZO	ALMUERZO	ALMUERZO	ALMUERZO
2-3 P.M	NUTRICION Y SALUD TEMAS I, II, III 1er y 2do GRUPO DE ALIMENTOS°	3er GRUPO DE ALIMENTOS (T.4) HIGIENE DE ALIMENTOS TEMA 5	ALIMENTACION FAMILIAR, MADRE EMBARAZADA Y LACTANTE	ALIMENTACION DE 0-1 AÑO (TEMA 9 AL 12)	ALIMENTACION DEL PREESCOLAR Y ESCOLAR. "EVALUACION FINAL"

NOTA: Hacer Enfasis en Alimentación Materna
Enseñar a hacer un Huerto
Enseñar buenas relaciones humanas.-

RADIO SPOTS - REPUBLICA DOMINICANA

1

Té

Pablo es un papá joven. Tiene confianza para dirigir su casa, es simpatico y escucha a Rosa cuando ella dice la verdad.
Rosa es una mamá joven, campesina e inteligente. Cuida bien a su marido pero conoce sus prioridades y no deja que ese cuidado le aparte de lo que ella sabe que es la verdad..

(abre con niño llorando)

PABLO: Rosa, atiende a ese muchachito, cállale la boca. Me esta poniendo loco y los vecinos se van a quejar.

ROSA: Espérate, lo voy a atender ahora y despues te prepara el desayuno a ti.

PABLO: Si, pero... dale un chin de te que todavía está llorando.

ROSA: No. No le voy a dar té. El médico me dijo que eso no lo alimenta y a veces hasta le hace daño. Le quita el apetito de mi leche y eso es lo que lo hace fuerte y dano. Además, el té no lo llena por mucho tiempo.
Ahorita vuelve a llora.

PABLO: Ta bien... Pablito debe comer lo que le alimenta—la leche del seno y no el té. Ve y atiéndelo.

ROSA: Ya, ya, Pablito, aqui esta tu leche (Se oye el niño mamando). Ahí tienes; la leche del pecho, tan rica como es, lo solo que querias, ¿verdad? (se oye al niño mamando, contento)

DOCTOR: Rosa tiene razón. El té no ayuda a su niño a crecer y a veces le hace daño. Lo primero que debe darle a su niño por la mañana es la leche de pecho y no un te.
Cuando se calme será porque esta bien comido y no porque está harto de té.

Lactancia (a)

Pablo está inquieto por el niño. También esta curioso al ver que Rosa fue al doctor. La mama vuelve el mensaje más ligero.
Rosa es otra vez la mama joven que esta siempre aprendiendo algo.

(abre con sonidos de campo)

ROSA: Pablo, fui donde el médico hoy. Me dijo que durante los primeros seis meses con la leche del pecho es suficiente; pero que es necesario seguir dándole el seno durante un año o más si puedo.

PABLO: ¿Y tu tienes suficiente leche? ¿No tienes que darle otra leche?.

ROSA: El doctor dice que mientras más se le da el pecho, más leche se produce. Y dice que la leche de la madre es el mejor alimento del mundo para el niño. Alimenta más, no necesita nada mas y es mucho mas facil de dar. Por eso no tengo que darle ni otra leche ni otro alimento durante los primeros seis meses y es siempre la mejor leche. Preguntale a tu mamá.

MAMA: ¡Claro que si Pablo Eso era todo lo que yo te dabe cuando eras chiquito. ¡Y mírate abora—fuerte, grande, inteligente

DOCTOR: Ayude a su niño a crecer fuerte y sano, dele leche de pecho. Los primeros seis meses., sólo con el seño es suficiente. La leche de la madre es el mejor alimento del mundo. No se puede comprar nada mejor.

Lactancia (b)

LOCUTOR: Atención: A continuación les hablará el conocido doctor José Hernandez, quien esta de visita hoy en esta radioemisora.

DOCTOR: Soy un doctor de niño. Hace mucho tiempo que curo niños enfermitos y quisiera darles un consejo. Asi que vine al radio para que todos puedan oirme.

Oíganme Bien... porque es importante lo que tengo que decriles sobre la elche que tiene el seno de la madre. Es la mejor del mundo y pone tan fuerte y sano al niño que el hombre más rico no puede comprar mejor alimento para su hijo. Las otras leches de lata, en polvo o de vaca-- no son tan buenas para su hijo, como la de la mama. Así que durante los primeros seis meses con la leche de la mamá es suficiente; sobre todo si se la dan por lo menos cinco o seis veces al día. Y si lo amamanta por lo menos durante un año, si niño crecera fuerte y se enfermará menos.

Si alguien le dijera que esto no es verdad... contéstele que se lo dijo un doctor que ha estudiado estas cosas durante muchos años... y que está cansado de ver niños enfermitos. Así es que por favor, dele a su niño leche de su mamá por lo menos durante un año... y en los primeros seis meses con solo la leche de su mamá tendrá lo que necesita.

Me sentife muy feliz porque habfa menos niños enfermitos. Mylo que es más importanteaún ... si ustedes hacen esto, ayudarán a sus niños a crecer fuertes.

4

ALIMENTACION SUPLEMENTARIA DE DESTETE (a)

DOCTOR: Madres, ustedes saben que durante los primeros seis meses la leche del pecho es suficiente y que es necesario seguir dando el seno durante un año o más tiempo si pueden. Pero a los seis meses, ¿que más le debe dar?

Primero: Siga dandole la leche del pecho, que es el mejor alimento.
Segundo: A los 4 meses su niño crece; asi es que saque del mismo arroz, habichuelas o guandules que cocina para toda la familia la cantidad suficiente para el niño

Maje el grano de la habichuela. Májela bien y pásela por un colador hasta que logre una crema suave y espesa. No le de solo la salsa. El grano es lo que alimenta. Después, mezcle esta crema y májela con arroz. También puede darle verduras y frutas preparadas en esta forma. Algunas de ustedes me dijeron que a un niño de seis meses no le hace estómago estos alimentos; pero podra hacerlo facilmente si lo preparan como yo les digo. Pruebelo, le vendra bien a su niño. Ofrezcale al niño guayaba, limón, cerezas, guineo, zanahoria ahuyama, y de todas las viveres que uested prepara para la familia, majelos bien y cuelelo para que le niño no se atore Las frutas dan todas las vitaminas que el niño necesita.

ALIMENTACION SUPLEMENTARIA DE DESTETE

Rosa - otra vez aprendiendo; esta vez de su madre, que ella pensaba tenia ideas muy viejas. Mamá - más al día que su hija. La situación es el reverso de la común: es la mamá que aprende nuevos métodos y que los sugiere a su hija.

ROSA: Mamá, ¿por que le esta echando esa crema de habichuelas tan espesa al arroz del niño? Yo na má le doy la salsa.

MAMA: El médico dice por el radio que un niño de seis meses necesita el grano entero de la habichuelas; pero machacado, y no solo la salsa.

ROSA: Pero, las habichuelas le van a dar gases y diarrea.

MAMA: No, si tu lo preparas así: Cuando cocinas las habichuelas de la familia saca un poco para el niño y machacalas bien hasta que sean una crema bien espesa y suelta. Luego pasalas por el colador y se las echas al arroz. Asi le hace estomago al niño. Tambien le puedes dar frutas y verduras preparadas de esta forma.

ROSA: Pero mamá, tu no me hacias eso a mi.

MAMA: ¿Y como yo lo iba a saber? Cuando eso yo no tenia radio.

DOCTOR: Hago como hace la mama de Rosa. A los seis meses dele a su niño arroz con los granos de habichuelas, bien machacadas y coladas... y no solamente la salsa. Son los granos los que alimentan más. Prepare las verduras y las frutas así y siga dandole el pecho.

Diarrea: Suero Casero

Rosa - aprendiendo cosas que puede hacer sísmisma -esta vez sobre la diarrea de su niño.
Milagros - sabe algo de como cuidar los niños

(Se oye niño lloriqueando).

MILAGROS: Rosa, tu pobre muchachito no tiene fuerza y ta'desgozaito con tanto dolor de barriga y diarrea.
¿Ya le diste suero casero para que no se ponga más debil?

ROSA: Pero yo no tengo suero, si dinero pa comprarlo.

MILAGROS: No Rosa, no es el que venden en la Botica. Es suero casero o sea hecho en la casa de uno. Tu lo puedes hacer tu misma y no tienes que comprar nada. Es para tomarse. Solamente hierves por diez minutos cinco vasos de agua, con dos cucharadas de azúcar y media cucharadita de sal. Cuando se enfrie se lo das al niño en jarritos o cucharadas todo el día. Y Claro, sigue dandole el pecho.

ROSA: ¿Y que cantidad de suero casero le doy al día?

MILAGROS: Los cinco vasos. Todo, para que reponga el agua que pierde con la diarrea y para que no se debilite y se muera.

MILAGROS: Si tu se lo das chin a chin durante todo el dia, al fin se habra tomado los cindo vasos. Por esto tambien puedes darle el seño todo el dia. Y si la diarrea sigue, lo llevas al médico o al hospital.

ROSA: Ta bien Le voy a dar suero casero desde el comimazo de una diarrea. Asi no se me debilita con la diarrea.

Diarrea y Vómitos

(Niño llorando)

ROSA: ¡Ohi mi pobre angelito Tiene diarrea y vómitos. ¿Que debo hacer? Milagros ¡dime que debo hacer.

MILAGROS: Rosa, la diarrea y los vómitos son muy peligrosos, porque juntos durante pocas horas pueden matar un niñito menor de un año. ¿Cuantas veces ha vomitado?

ROSA: Cinco o seis veces en las últimas dos horas.

MILAGROS: Mercedes,.. niña ¡Corre. Llama a Don Ramón para que el nos lleve donde un médico.

MERCEDES: Si mama?..... ¡Don Ramón.....¡Don Ramón

(puente de música)

LOCUTOR: Milagros, Rosa y el niño llegaron a tiempo y el médico le salvo la vida al niño. Escuchelas ahora.

ROSA: Doctor ¿porque vomitos y diarrea juntos son peligrosos para niños muy tiernos?

DOCTOR: Porque el cuerpo pierde mucha agua, se seca. Por eso hay que darle agua, pues el cuerpo esta botando toda su agua Asi que lleve al hospital o al centro de salud al niño que tenga diarrea con vómitos.

MILAGROS: Tambien, Eso mismo dice la promotora Elupina que trabaja en nuestro pareje.

Higiene (a)

DOCTOR: Saludos amigos... les habla su amigo el doctor Hernandez y tengo algunas cosas importantes que decirr les sobre el cuidado de sus niños . Un niño pequeñito es indefenso y todavía no es fuerte, asi que necesita un cuidado especial. El sucio es su enemigo número uno. Ante todo deben estregar con agua y jabón su plato y su cuchara antes y despues de usarlos. Luego deben taparse con un paño limpio para protegerlos del polvo y de las moscas. Si el plato o la cuchara se caen al suelo... y especialmente si el bobo cae al piso... deben lavarlo de nuevo antes de que el niño lo use otra vez. Ustedes estarán pensando: ¡que latoso es este doctor con sus consejos.... Pero les digo todo esto por los microbios. Los microbics son unos bichitos tantchiquitos que ustedes no les pueden ver, pero se esconden en el polvo y en todo lo que esta sucio y le dan diarrea, vómitos, ahogos y otras enfermedades terribles al niño. De modo que pongame atención y sigan estos consejos hasta que se acostubren a hacerlo sin darse cuenta. Despúes de todo, lo que les pido es para el bien de su niño... y seguramente ustedes también lo desean.

Higiene (b)

Se supone que muchas madres se ven obligadas a dejar a sus bebés con los niños mayores y se debe, por tanto, enseñarles que deben hacer... La madre es dulce; la hija, Mercedes, respetuosa.

(La misma voz de la otra madre)

MADRE: Mercedes, ya tú eres una mujercita... Así que dejaré al niño contigo porque tengo que ir al conuco.

MERCEDES: Sí, mamá.

MADRE: Pero pon atención a lo que te voy a decir... Porque un niño es algo muy indefenso y no tiene resistencia; así que tienes que lavar sus trastos con jabón y agua caliente antes y despues de usarlos.

MERCEDES: (Refunfuñando un poco). ¡Conchole!

MADRE: (un poco cortante)
Después que usas los tratos, cubrelos con un paño... Pa'protegerlos del polvo y de las moscas... si se te cae cualquier trasto o el bobo al piso no debes usarlo de nuevo hasta que le lo laves. Mercedes, ¿entendiste?

MERCEDES: Sí mamá... pero ¿por qué?

MADRE: ¡Adió! por los bichos. Por los microbios. El doctor dice que son unos animalitos que se esconden en el polvo y el agua sucia y no los podemos ver; pero que le dan vómitos y diarreas al niño. ¿Tú tás entendiendo bien?

MERCEDES: Sí mamá... Te entendí, yo quiero mucho a Pablito, así que lo lavare los trastos y los taparé con un paño limpio y le tendré limpio todo lo que se meta en la boca. No dejaré que esos condenados bichos de los microbios lo enfermen.

(Suena un beso... y un arrullo infantil, si hay tiempo).

10

Agua Hervida

ROSA: ¡Ay Milagros! Mi Pablito tiene diarrea de nuevo. ¿No hay alguna forma de evitar esta calamidad?

MILAGROS: Tu pobre niño. Sabés, al niño de Susana no le da diarrea a menudo. Ella dice que oyó por radio a un doctor decirle que hierva toda el agua que toma el niño hasta que el niño tenga dos años.

ROSA: Ella debe estar loca. Por aquí nunca hemos hervido el agua.

MILAGROS: Oye, aquí está hablando el médico por la radio.

DOCTOR: (Con filtro) El agua contiene microbios, unos animalitos que no se pueden ver, pero que dan diarrea. Por eso, da sólo agua hervida a tus niños menores de dos años. Después que el agua comience a hervir, hiérvela por un largo rato para sacar estos animalitos que enferman. Luego tape la cacerola para mantenerlo limpiecito. Así se puede evitar la diarrea.

MILAGROS: ¿Usted ve Rosa? Quizás nosotras somos un poco locas.

ROSA: Yo creo que es tiempo de cambiar una de nuestras costumbres en esta comunidad. Yo voy a hervir toda el agua para mi hijo, para sacar estos microbios. También yo le voy a decir a Susana lo inteligente que ella es al hervir el agua para su hijo.

Promotorasa la Puerta

ANUNCIANTE: Las Promotoras pueden ayudarles con problemas de salud, especialmente de niños pequeños. Ellas están bien capacitadas y equipadas con medicinas simples. Búsquelas en su comunidad Pongales atención a sus consejos. Ayudelas en su trabajo en la comunidad.
Escuchen ahora como Rosa va a encontrar la nueva Promotora.
(Tocando la puerta)

PROMOTORA: Hola ¿Hay alguien en casa? ¿Puedo entrar? Mi nombre es Elupina. Yo soy la Promotora de salud para esta comunidad.

ROSA: Entre. Si usted es la Promotora de salud, digame que anda mal con Pablito. El tiene ocho meses y todavía no se sienta Yo le doy el seno exactamente igual que lo dice el médico en le dadio.

PROMOTORA: Continúe dándole el seño. Pero Pablito está bajo de peso. Recuerde que el médico dice que el deberá también comer habichuelas y arroz, preparadas en una forma cremasa y espesa. Comience dándole algunas cucharadas primero, luego más. A el le contentará, pero sea paciente con el. El debe aprender a comer estas nuevas comidas.

ROSA: Gracias por venir. Gracias por sus consejos.

PROMOTORA: Yo vivo cerca, así es que yo volveré en unos dias.

ANUNCIANTE: Las Promotoras estan bien entrenadas. Busquelas. Pongale atención a sus consejos. Apoye sus esfuerzos en la comunidad.